

APPENDIX B. SPECIES AND CRITICAL HABITATS EVALUATED IN THE MULTI-SPECIES CONSERVATION STRATEGY

Appendix B includes:

Table B-1. Species and FESA-Designated Critical Habitats Evaluated in the Multi-Species Conservation Strategy

Table B-1. Species and FESA-Designated Critical Habitats Evaluated in the Multi-Species Conservation Strategy

Multi-Species Conservation Strategy User Guide

This table presents the species and FESA designated critical habitats evaluated in the Multi-Species Conservation Strategy (MSCS) and describes the criteria used to select the evaluated species. The table also identifies each species' MSCS goal and the likelihood that CALFED may affect that species. Species goals are discussed in Chapter 3, and Chapter 4 discusses the determination of the potential for CALFED effects on species.

Criteria for Developing the Preliminary Species List

The preliminary species list includes special-status species known to occur or with potential to occur in the MSCS Focus Area (i.e., the Ecosystem Restoration Programs [ERP's] 14 ecological management zones and 12 potential reservoir sites). The preliminary list was developed using the criteria described below.

Special-status species are species having some form of endangerment or concern status. These species are:

- C listed as threatened or endangered under the federal Endangered Species Act (FESA);
- C listed as threatened or endangered under the California Endangered Species Act (CESA);
- C listed as rare under the California Native Plant Protection Act;
- C proposed for federal listing under the FESA;
- C California candidates under CESA;
- C federal candidates under FESA;
- C California fully protected species or specified birds;
- C California species of special concern (CSC);
- C California Native Plant Society (CNPS) List 1A, 1B, 2, or 3; or
- C other species of concern to CALFED.

The determination that a species has the potential to occur in the MSCS focus area was based on the species-known range and the presence of suitable habitat within the MSCS focus area.

Species Evaluated in the Multi-Species Conservation Strategy

The preliminary species list was reduced to the list of species to be evaluated in the MSCS by application of the following criteria:

- C the species is federally or California-listed as rare, threatened, or endangered, or is a California fully protected species; or
- C the species could become federally or California-listed as threatened or endangered during the term of CALFED implementation, and CALFED actions could affect the species, or
- C CALFED actions could affect a substantial portion of the species' range or important habitat, and CALFED actions could affect these species.

Species considered to have the potential to become federally or California-listed as threatened or endangered during the term of CALFED implementation are those that are:

- C proposed for federal listing, or
- C California candidates, or
- C federal candidates, or
- C CSC (each species considered individually for inclusionCsee Decision Criteria), or
- C specified birds (each species considered individually for inclusionCsee Decision Criteria), or
- C CNPS List 1, 2, and 3 (each species considered individually for inclusionCsee Decision Criteria), or
- C other species of concern (each species considered individually for inclusionCsee Decision Criteria).

CSC, specified birds, CNPS Lists 1B3, and other species of concern are included if CALFED actions could affect a substantial portion of the species' range or important habitat or if the species is rare or its distribution is limited.

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³				
			Federal	State	Other	May be Affected	Not Likely to be Affected	Decision Criteria ⁴		
Federally Listed as Endangered or Threatened										
Mammals										
m	Giant kangaroo rat	<i>Dipodomys ingens</i>	E	CE	-	X		L		
r	San Joaquin Valley woodrat	<i>Neotoma fuscipes riparia</i>	E	CSC	-	X		L		

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
Federally Listed as Endangered or Threatened (continued)											
Mammals (continued)											
r	Salt marsh harvest mouse	<i>Reithrodontomys raviventris</i>	E	CE/FP	-	X		L			
r	Riparian brush rabbit	<i>Sylvilagus bachmani riparius</i>	E	CE	-	X		L			
m	San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	CT	-	X		L			
Birds											
m	Aleutian Canada goose	<i>Branta canadensis leucopareia</i>	T	-	-	X		L			
m	Bald eagle	<i>Haliaeetus leucocephalus</i>	T/PR	CE/FP	-	X		L			
m	California brown pelican	<i>Pelecanus occidentalis californicus</i>	E	CE/FP	-		X1	L			
r	California clapper rail	<i>Rallus longirostris obsoletus</i>	E	CE/FP	-	X		L			
m	California condor	<i>Gymnogyps californianus</i>	E	CE/FP	-		X1	L			
m	California least tern	<i>Sterna antillarum browni</i>	E	CE/FP	-	X		L			
r	Least Bell's vireo	<i>Vireo bellii pusillus</i>	E	CE	-	X		L			
m	Northern spotted owl	<i>Strix occidentalis caurina</i>	T	-	-		X2	L			
	Northern spotted owl critical habitat	<i>Strix occidentalis caurina</i> critical habitat									
m	Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	CSC	-	X		L			
Reptiles											
m	Alameda whipsnake	<i>Masticophis lateralis euryxanthus</i>	T	CT	-	X		L			
m	Blunt-nosed leopard lizard	<i>Gambelia sila</i>	E	CE/FP	-	X		L			
r	Giant garter snake	<i>Thamnophis gigas</i>	T	CT	-	X		L			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³				
			Federal	State	Other	May be Affected	Not Likely to be Affected	Decision Criteria ⁴		
Federally Listed as Endangered or Threatened (continued)										
Amphibians										
m	California red-legged frog	<i>Rana aurora draytonii</i>	T	CSC	-	X		L		
Fish										
m	Central California Coast steelhead evolutionarily significant unit (ESU)	<i>Oncorhynchus mykiss</i>	T	-	-	X		L		
	Central California Coast steelhead ESU critical habitat	<i>Oncorhynchus mykiss</i> critical habitat								
R	Central Valley steelhead ESU	<i>Oncorhynchus mykiss</i> (cv)	T	-	-	X		L		
	Central Valley steelhead ESU critical habitat	<i>Oncorhynchus mykiss</i> (cv) critical habitat								
R	Central Valley spring-run chinook salmon ESU	<i>Oncorhynchus tshawytscha</i> (sr)	T	CT	-	X		L		
	Central Valley spring-run chinook salmon ESU critical habitat	<i>Oncorhynchus tshawytscha</i> (sr) critical habitat								
R	Delta smelt	<i>Hypomesus transpacificus</i>	T	CT	-	X		L		
	Delta smelt critical habitat	<i>Hypomesus transpacificus</i> critical habitat								
R	Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	T	CSC	-	X		L		
m	Tidewater goby	<i>Eucyclogobius newberryi</i>	E	CSC	-		X2	L		
R	Sacramento River winter-run chinook salmon ESU	<i>Oncorhynchus tshawytscha</i> (wr)	E	CE	-	X		L		
	Sacramento River winter-run chinook salmon ESU critical habitat	<i>Oncorhynchus tshawytscha</i> (wr) critical habitat								

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴
			Federal	State	Other	May be Affected	Not Likely to be Affected	
Invertebrates								
m	California freshwater shrimp	<i>Syncaris pacifica</i>	E	CE	-	X		L
m	Callippe silverspot	<i>Speyeria callippe callippe</i>	E	-	-		X2	L
m	Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	-	-	X		L
r	Delta green ground beetle	<i>Elaphrus viridis</i>	T	-	-	X		L
	Delta green ground beetle critical habitat	<i>Elaphrus viridis</i> critical habitat						
R	Lange's metalmark	<i>Apodemia mormo langei</i>	E	-	-	X		L
m	Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	E	-	-		X2	L
R	Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	-	-	X		L
	Valley elderberry longhorn beetle critical habitat	<i>Desmocerus californicus dimorphus</i> critical habitat						
m	Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	-	-	X		L
m	Vernal pool tadpole shrimp	<i>Lepidurus packardi</i>	E	-	-	X		L
Plants								
m	Sonoma alopecurus	<i>Alopecurus aequalis</i> var. <i>sonomensis</i>	E	-	1B		X2	L
m	Large-flowered fiddleneck	<i>Amsinckia grandiflora</i>	E	CE	1B	X		L
	Large-flowered fiddleneck critical habitat	<i>Amsinckia grandiflora</i> critical habitat						
m	Ione manzanita	<i>Arctostaphylos myrtifolia</i>	T	-	1B		X2	L
m	Pallid manzanita	<i>Arctostaphylos pallida</i>	T	CE	1B		X2	L

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
Federally Listed as Endangered or Threatened (continued)											
Plants (continued)											
m	Clara Hunt's milkvetch	<i>Astragalus clarianus</i>	E	CT	1B		X2	L			
m	Sonoma sunshine	<i>Blennosperma bakeri</i>	E	CE	1B		X2	L			
m	Chinese Camp brodiaea	<i>Brodiaea pallida</i>	T	CE	1B	X		L			
m	Tiburon Mariposa lily	<i>Calochortus tiburonensis</i>	T	CT	1B		X2	L			
m	Stebbins' morning-glory	<i>Calystegia stebbinsii</i>	E	CE	1B		X2	L			
m	San Benito evening-primrose	<i>Camissonia benitensis</i>	T	-	1B		X2	L			
m	White sedge	<i>Carex albida</i>	E	CE	1B		X2	L			
m	Tiburon Indian paintbrush	<i>Castilleja affinis</i> ssp. <i>neglecta</i>	E	CT	1B		X2	L			
m	Succulent owl's-clover	<i>Castilleja campestris</i> ssp. <i>succulenta</i>	T	CE	1B	X		L			
m	Pine Hill ceanothus	<i>Ceanothus roderickii</i>	E	R	1B		X2	L			
m	Hoover's spurge	<i>Chamaesyce hooveri</i>	T	-	1B	X		L			
m	Sonoma spineflower	<i>Chorizanthe valida</i>	E	CE	1B		X2	L			
R	Suisun thistle	<i>Cirsium hydrophilum</i> var. <i>hydrophilum</i>	E	-	1B	X		L			
R	Soft bird's-beak	<i>Cordylanthus mollis</i> ssp. <i>mollis</i>	E	R	1B	X		L			
m	Palmate-bracted bird's-beak	<i>Cordylanthus palmatus</i>	E	CE	1B	X		L			
m	Baker's larkspur	<i>Delphinium bakeri</i>	E	R	1B		X2	L			
m	Yellow larkspur	<i>Delphinium luteum</i>	E	R	1B		X2	L			
m	Hoover's eriastrum	<i>Eriastrum hooveri</i>	T	-	-	X		L			
m	Ione buckwheat	<i>Eriogonum apricum</i> var. <i>apricum</i>	E	CE	1B		X2	L			
m	Loch Lomond button-celery	<i>Eryngium constancei</i>	E	CE	1B		X2	L			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
Federally Listed as Endangered or Threatened (continued)											
Plants (continued)											
R	Contra Costa wallflower	<i>Erysimum capitatum</i> ssp. <i>angustatum</i>	E	CE	1B	X		L			
	Contra Costa wallflower critical habitat	<i>Erysimum capitatum</i> ssp. <i>angustatum</i> critical habitat									
m	Pine Hill flannelbush	<i>Fremontodendron decumbens</i>	E	R	1B		X2	L			
m	El Dorado bedstraw	<i>Galium californicum</i> ssp. <i>sierrae</i>	E	R	1B		X2	L			
m	Marin western flax	<i>Hesperolinon congestum</i>	T	CT	1B		X2	L			
m	Contra Costa goldfields	<i>Lasthenia conjugens</i>	E	-	1B	X		L			
m	San Joaquin woolythreads	<i>Lembertia congdonii</i>	E	-	1B	X		L			
m	Pitkin Marsh lily	<i>Lilium pardalinum</i> ssp. <i>pitkinense</i>	E	CE	1B		X2	L			
m	Butte County meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>californica</i>	E	CE	1B		X2	L			
m	Sebastopol meadowfoam	<i>Limnanthes vinculans</i>	E	CE	1B		X2	L			
m	Few-flowered navarretia	<i>Navarretia leucocephala</i> ssp. <i>pauciflora</i>	E	CT	1B		X2	L			
m	Many-flowered navarretia	<i>Navarretia leucocephala</i> ssp. <i>plieantha</i>	E	E	1B		X2	L			
m	Colusa grass	<i>Neostapfia colusana</i>	T	CE	1B	X		L			
R	Antioch Dunes evening-primrose	<i>Oenothera deltoides</i> ssp. <i>howellii</i>	E	CE	1B	X		L			
	Antioch Dunes evening-primrose critical habitat	<i>Oenothera deltoides</i> ssp. <i>howellii</i> critical habitat									
m	San Joaquin Valley orcutt grass	<i>Orcuttia inaequalis</i>	T	CE	1B	X		L			
m	Hairy orcutt grass	<i>Orcuttia pilosa</i>	E	CE	1B	X		L			
m	Slender orcutt grass	<i>Orcuttia tenuis</i>	T	CE	1B	X		L			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
Federally Listed as Endangered or Threatened (continued)											
Plants (continued)											
m	Sacramento orcutt grass	<i>Orcuttia viscosa</i>	E	CE	1B	X		L			
m	White-rayed pentachaeta	<i>Pentachaeta bellidiflora</i>	E	CE	1B		X2	L			
m	Calistoga popcornflower	<i>Plagiobothrys strictus</i>	E	CT	1B		X2	L			
m	Napa blue grass	<i>Poa napensis</i>	E	CE	1B		X2	L			
m	Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	E	CE	1B	X		L			
m	San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	T	CE	1B		X2	L			
m	Layne's ragwort	<i>Senecio layneae</i>	T	R	1B	X		L			
m	Kenwood Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>valida</i>	E	CE	1B		X2	L			
m	Tiburon jewelflower	<i>Streptanthus niger</i>	E	CE	1B		X2	L			
m	California seablitz	<i>Suaeda californica</i>	E	-	1B	X		L			
m	Showy Indian clover	<i>Trifolium amoenum</i>	E	-	1B		X2	L			
m	Greene's tectoria	<i>Tectoria greenei</i>	E	R	1B	X		L			
r	Crampton's tectoria	<i>Tectoria mucronata</i>	E	CE	1B	X		L			
m	California vervain	<i>Verbena californica</i>	T	CT	1B		X2	L			
California Listed as Endangered, Threatened, Rare, or Fully Protected and Not Federally Listed											
Mammals											
m	California wolverine	<i>Gulo gulo luteus</i>	-	CT/FP	SC		X2	L			
m	Nelson's antelope ground squirrel	<i>Ammospermophilus nelsoni</i>	-	CT	SC	X		L			
m	Ringtail	<i>Bassariscus astutus</i>	-	FP	-	X		L			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³				
			Federal	State	Other	May be Affected	Not Likely to be Affected	Decision Criteria ⁴		
California Listed as Endangered, Threatened, Rare, or Fully Protected and Not Federally Listed (continued)										
Birds										
m	American peregrine falcon	<i>Falco peregrinus anatum</i>	-	CE/FP	-	X		L		
r	Bank swallow	<i>Riparia riparia</i>	-	CT	-	X		L		
r	California black rail	<i>Laterallus jamaicensis coturniculus</i>	-	CT/FP	SC	X		L		
m	Golden eagle	<i>Aquila chrysaetos</i>	PR	CSC/FP	-		X1	L		
r	Greater sandhill crane	<i>Grus canadensis tabida</i>	-	CT/FP	-	X		L		
r	Little willow flycatcher	<i>Empidonax traillii brewsteri</i>	-	-	SC	X		L		
r	Swainson's hawk	<i>Buteo swainsoni</i>	-	CT	-	X		L		
r	Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	-	CE	-	X		L		
m	White-tailed kite	<i>Elanus leucurus</i>	-	FP	-	X		L		
Amphibians										
m	Limestone salamander	<i>Hydromantes brunus</i>	-	CT/FP	SC		X2	L		
m	Shasta salamander	<i>Hydromantes shastae</i>	-	CT	SC	X		L		
Fish										
m	Rough sculpin	<i>Cottus Asperrimus</i>	-	CT/FP	SC	X		L		
Plants										
m	Baker's manzanita	<i>Arctostaphylos bakeri</i> ssp. <i>bakeri</i>	-	R	1B/SC		X2	L		
m	Indian Valley brodiaea	<i>Brodiaea coronaria</i> ssp. <i>rosea</i>	-	CE	1B	X		L		
m	Tree-anenome	<i>Carpenteria californica</i>	-	CT	1B/SC	X		L		
m	Mason's ceanothus	<i>Ceanothus masonii</i>	-	R	1B/SC		X2	L		
m	Mt. Diablo bird's-beak	<i>Cordylanthus nidularius</i>	-	R	1B/SC		X2	L		

Table B-1. Continued

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Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³				
			Federal	State	Other	May be Affected	Not Likely to be Affected	Decision Criteria ⁴		
California Listed as Endangered, Threatened, Rare, or Fully Protected and Not Federally Listed (continued)										
Plants (continued)										
m	Irish Hill buckwheat	<i>Eriogonum apicum</i> var. <i>prostratum</i>	-	CE	1B		X2	L		
r	Delta coyote-thistle	<i>Eryngium racemosum</i>	-	CE	1B/SC	X		L		
m	Boggs Lake hedge-hyssop	<i>Gratiola heterosepala</i>	-	CE	1B	X		L		
m	Santa Cruz tarplant	<i>Holocarpha macradenia</i>	PT	CE	1B		X2	L		
R	Mason's lilaeopsis	<i>Lilaeopsis masonii</i>	-	R	1B/SC	X		L		
m	North Coast semaphore grass	<i>Pleuropogon hooverianus</i>	-	R	1B/SC		X2	L		
m	Rock sanicle	<i>Sanicula saxatilis</i>	-	R	1B/SC	X		L		
m	Marin checkerblooms	<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>	-	-	1B/SC		X2	L		
Federally Proposed and Not California Listed										
Birds										
m	Mountain plover	<i>Charadrius montanus</i>	PT	CSC	-	X		P		
Federal Candidate and Not California Listed										
Amphibian										
m	California tiger salamander	<i>Ambystoma californiense</i>	C	CSC	-	X		P		
Fish										
R	Central Valley fall-/late-fall-run chinook salmon ESU	<i>Oncorhynchus tshawytscha</i> (fr)	C	CSC	-	X		P		
m	McCloud River redband trout	<i>Oncorhynchus mykiss</i> ssp 2	C	CSC	-	X		P		

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2											
Mammals											
m	Greater western mastiff-bat	<i>Eumops perotis californicus</i>	-	CSC	SC	X		A			
r	San Pablo California vole	<i>Microtus californicus sanpabloensis</i>	-	CSC	-	X		A			
R	Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	-	CSC	SC	X		B			
Birds											
m	Black tern	<i>Chlidonias niger</i>	-	CSC	SC	X		B			
m	California gull	<i>Larus californicus</i>	-	CSC	-	X		B			
r	California yellow warbler	<i>Dendroica petechia brewsteri</i>	-	CSC	-	X		A			
m	Cooper's hawk	<i>Accipiter cooperii</i>	-	CSC	-	X		A			
m	Double-crested cormorant (rookery)	<i>Phalacrocorax auritus</i>	-	CSC	-	X		A			
m	Long-billed curlew	<i>Numenius americanus</i>	-	CSC	-	X		A			
m	Long-eared owl	<i>Asio otus</i>	-	CSC	-	X		B			
m	Northern harrier	<i>Circus cyaneus</i>	-	CSC	-	X		A			
m	Osprey	<i>Pandion haliaetus</i>	-	CSC/SB	-	X		A			
r	Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	-	CSC	SC	X		A			
R	San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	-	CSC	SC	X		A			
m	Short-eared owl	<i>Asio flammeus</i>	-	CSC	-	X		B			
R	Suisun song sparrow	<i>Melospiza melodia maxillaris</i>	-	CSC	SC	X		A			
m	Tricolored blackbird	<i>Agelaius tricolor</i>	-	CSC	SC	X		A			
m	Western burrowing owl	<i>Athene cunicularia hypugea</i>	-	CSC	SC	X		A			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Birds (continued)											
m	Western least bittern	<i>Ixobrychus axilis</i>	-	CSC	SC	X		A			
m	White-faced ibis	<i>Plegadis chihi</i>	-	CSC	SC	X		A			
m	Yellow-breasted chat	<i>Icteria virens</i>	-	CSC	-	X		A			
Reptiles											
m	San Joaquin whipsnake	<i>Masticophis flagellum ruddocki</i>	-	CSC	SC	X		B			
m	Western pond turtle	<i>Clemmys marmorata</i>	-	CSC	SC	X		A			
Amphibians											
m	Foothill yellow-legged frog	<i>Rana boylii</i>	-	CSC	SC	X		A			
m	Western spadefoot	<i>Scaphiopus hammondii</i>	-	CSC	SC	X		A			
Fish											
R	Green sturgeon	<i>Acipenser medirostris</i>	-	CSC	-	X		B			
m	Hardhead	<i>Mylopharodon conocephalus</i>	-	CSC	-	X		B			
R	Longfin smelt	<i>Spirinchus thaleichthys</i>	-	CSC	-	X		B			
r	Sacramento perch	<i>Archoplites interruptus</i>	-	CSC	SC	X		B			
Invertebrates											
m	Monarch butterfly (roost)	<i>Danaus plexippus</i>	-	-	-	X		B			
Plants											
m	Sharsmith's onion	<i>Allium sharsmithae</i>	-	-	1B	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Plants (continued)											
m	Rawhide Hill onion	<i>Allium tuolumnense</i>	-	-	1B	X		B			
m	Dimorphic snapdragon	<i>Antirrhinum subcordatum</i>	-	-	1B	X		B			
m	Mt. Diablo manzanita	<i>Arctostaphylos auriculata</i>	-	-	1B	X		B			
m	Klamath manzanita	<i>Arctostaphylos klamathensis</i>	-	-	1B/SC	X		B			
m	Contra Costa manzanita	<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i>	-	-	1B	X		B			
R	Suisun Marsh aster	<i>Aster latus</i>	-	-	1B/SC	X		A			
m	Big Bear Valley woollypod	<i>Astragalus leucolobus</i>	-	-	1B/SC	X		B			
m	Jepson's milkvetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	-	-	1B	X		B			
m	Ferris' milkvetch	<i>Astragalus tener</i> var. <i>ferrisiae</i>	-	-	1B/SC	X		A			
r	Alkali milkvetch	<i>Astragalus tener</i> var. <i>tener</i>	-	-	1B/SC	X		A			
m	Heartscale	<i>Atriplex cordulata</i>	-	-	1B/SC	X		A			
m	Brittlescale	<i>Atriplex depressa</i>	-	-	1B/SC	X		A			
m	San Joaquin spearscale	<i>Atriplex joaquiniana</i>	-	-	1B/SC	X		A			
m	Lesser saltscale	<i>Atriplex minuscula</i>	-	-	1B/SC	X		A			
m	Vernal pool smallscale	<i>Atriplex persistens</i>	-	-	1B	X		B			
m	Lost Hills crownscale	<i>Atriplex vallicola</i>	-	-	1B/SC	X		A			
m	Big tarplant	<i>Blepharizonia plumosa</i> ssp. <i>plumosa</i>	-	-	1B	X		B			
m	Mt. Diablo fairy lantern	<i>Calochortus pulchellus</i>	-	-	1B	X		B			
m	Sharsmith's harebell	<i>Campanula sharsmithiae</i>	-	-	1B/SC	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Plants (continued)											
r	Bristly sedge	<i>Carex comosa</i>	-	-	2	X		B			
m	Dwarf soaproot	<i>Chlorogalum pomeridianum</i> var. <i>minus</i>	-	-	1B	X		B			
m	Slough thistle	<i>Cirsium crassicaule</i>	-	-	1B/SC	X		A			
m	Mariposa clarkia	<i>Clarkia biloba</i> ssp. <i>australis</i>	-	-	1B	X		B			
m	Shasta clarkia	<i>Clarkia borealis</i> spp. <i>arida</i>	-	-	1B/SC	X		B			
m	Beaked clarkia	<i>Clarkia rostrata</i>	-	-	1B/SC	X		B			
r	Point Reyes bird's-beak	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	-	-	1B/SC	X		A			
m	Hispid bird's-beak	<i>Cordylanthus mollis</i> ssp. <i>hispidus</i>	-	-	1B/SC	X		A			
m	Mt. Hamilton coreopsis	<i>Coreopsis hamiltonii</i>	-	-	1B/SC	X		B			
m	Silky cryptantha	<i>Cryptantha crinita</i>	-	-	1B/SC	X		B			
m	Hospital Canyon larkspur	<i>Delphinium californicum</i> ssp. <i>interius</i>	-	-	1B/SC	X		B			
m	Recurved larkspur	<i>Delphinium recurvatum</i>	-	-	1B/SC	X		B			
m	Four-angled spikerush	<i>Eleocharis quadrangulata</i>	-	-	2	X		A			
m	Brandegee's eriastrum	<i>Eriastrum brandegeae</i>	-	-	1B/SC	X		B			
m	Ben Lomond buckwheat	<i>Eriogonum nudum</i> var. <i>decurrens</i>	-	-	1B	X		B			
m	Spiny-sepaled button-celery	<i>Eryngium spinosepalum</i>	-	-	1B/SC	X		A			
m	Diamond-petaled California poppy	<i>Eschscholzia rhombipetala</i>	-	-	1A/SC	X		B			
m	Adobe-lily	<i>Fritillaria pluriflora</i>	-	-	1B/SC	X		B			
m	Diablo helianthella	<i>Helianthella castanea</i>	-	-	1B/SC	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Plants (continued)											
m	Hall's tarplant	<i>Hemizonia halliana</i>	-	-	1B	X		B			
m	Congdon's tarplant	<i>Hemizonia parryi</i> ssp. <i>congdonii</i>	-	-	1B/SC	X		A			
m	Brewer's western flax	<i>Hesperolinon breweri</i>	-	-	1B/SC	X		B			
m	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	-	-	1B/SC	X		B			
m	Napa western flax	<i>Hesperolinon serpentinum</i>	-	-	1B	X		B			
m	Tehama County western flax	<i>Hesperolinon tehamense</i>	-	-	1B/SC	X		B			
m	Rose-mallow	<i>Hibiscus lasiocarpus</i>	-	-	2	X		A			
m	Parry's horkelia	<i>Horkelia parryi</i>	-	-	1B/SC	X		B			
m	Carquinez goldenbush	<i>Isocoma arguta</i>	-	-	1B/SC	X		A			
r	Northern California black walnut (native stands)	<i>Juglans californica</i> var. <i>hindsii</i>	-	-	1B/SC	X		A			
m	Ahart's dwarf rush	<i>Juncus leiospermus</i> var. <i>ahartii</i>	-	-	1B/SC	X		B			
r	Delta tule pea	<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	-	-	1B/SC	X		A			
m	Pale-yellow layia	<i>Layia heterotricha</i>			1B/SC	X		B			
m	Legenere	<i>Legenere limosa</i>	-	-	1B/SC	X		B			
m	Panoche peppergrass	<i>Lepidium jaredii</i> ssp. <i>album</i>	-	-	1B/SC	X		A			
m	Heckard's peppergrass	<i>Lepidium latipes</i> var. <i>heckardii</i>	-	-	1B	X		B			
m	Saw-toothed lewisia	<i>Lewisia serrata</i>	-	-	1B/SC	X		B			
m	Bellinger's meadowfoam	<i>Limnanthes floccosa</i> ssp. <i>bellingeriana</i>	-	-	1B/SC	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Plants (continued)											
r	Delta mudwort	<i>Limosella subulata</i>	-	-	2	X		A			
m	Mt. Tedoc linanthus	<i>Linanthus nuttallii</i> ssp. <i>howellii</i>	-	-	1B/SC	X		B			
m	Madera linanthus	<i>Linanthus serrulatus</i>	-	-	1B	X		B			
m	Congdon's lomatium	<i>Lomatium congdonii</i>	-	-	1B/SC	X		B			
m	Red-flowered lotus	<i>Lotus rubriflorus</i>	-	-	1B/SC	X		B			
m	Shaggyhair lupine	<i>Lupinus spectabilis</i>	-	-	1B/SC	X		B			
m	Showy madia	<i>Madia radiata</i>	-	-	1B	X		B			
m	Hall's bush mallow	<i>Malacothamnus hallii</i>	-	-	1B	X		B			
m	Pincushion navarretia	<i>Navarretia myersii</i>	-	-	1B	X		B			
m	Shasta snow-wreath	<i>Neviusia cliftonii</i>	-	-	1B	X		A			
m	Ahart's paronychia	<i>Paronychia ahartii</i>	-	-	1B/SC	X		B			
m	Thread-leaved beardtongue	<i>Penstemon filiformis</i>	-	-	1B/SC	X		B			
m	Merced phacelia	<i>Phacelia ciliata</i> var. <i>opaca</i>	-	-	1B/SC	X		B			
m	Mt. Diablo phacelia	<i>Phacelia phaceloides</i>	-	-	1B/SC	X		B			
m	Eel-grass pondweed	<i>Potamogeton zosteriformis</i>	-	-	2	X		A			
m	California beaked-rush	<i>Rhynchospora californica</i>	-	-	1B/SC	X		A			
m	Sanford's arrowhead	<i>Sagittaria sanfordii</i>	-	-	1B/SC	X		A			
m	Marsh skullcap	<i>Scutellaria galericulata</i>	-	-	2	X		B			
m	Mad-dog skullcap	<i>Scutellaria lateriflora</i>	-	-	2	X		A			
m	Red Hills ragwort	<i>Senecio clevelandii</i> var. <i>heterophyllus</i>	-	-	1B	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
California Species of Special Concern or CNPS List 1 or 2 (continued)											
Plants (continued)											
m	Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	-	-	1B/SC	X		A			
m	English Peak greenbriar	<i>Smilax jamesii</i>	-	-	1B	X		A			
m	Most beautiful jewel-flower	<i>Streptanthus albidus</i> ssp. <i>peramoensis</i>	-	-	1B	X		B			
m	Mt. Hamilton jewelflower	<i>Streptanthus callistus</i>	-	-	1B/SC	X		B			
m	Mt. Diablo jewelflower	<i>Streptanthus hispidus</i>	-	-	1B/SC	X		B			
m	Arburua Ranch jewelflower	<i>Streptanthus insignis</i> ssp. <i>lyonii</i>	-	-	1B/SC	X		B			
Other Species of Concern or CNPS List 3											
Mammals											
m	Merced kangaroo rat	<i>Dipodomys heermanni dixoni</i>	-	-	SC	X		A			
Birds											
m	Black-crowned night heron (rookery)	<i>Nycticorax nycticorax</i>	-	-	SC	X		A			
m	Grasshopper sparrow	<i>Ammodramus savannarum</i>	-	-	SC	X		B			
m	Great blue heron (rookery)	<i>Ardea herodias</i>	-	-	SC	X		A			
m	Great egret (rookery)	<i>Casmerodius albus</i>	-	SB	SC	X		A			
m	Snowy egret (rookery)	<i>Egretta thula</i>	-	SB	SC	X		A			
Invertebrates											
m	Mid-valley fairy shrimp	<i>Brachinecta n.</i> sp. "mid-valley"	-	-	SC	X		A			
m	Shasta sideband	<i>Monadenia troglodytes</i>	-	-	SC	X		B			

Table B-1. Continued

Species Goals ¹	Common Name	Scientific Name	Status ²			Potential Effects of CALFED Actions ³		Decision Criteria ⁴			
			Federal	State	Other	May be Affected	Not Likely to be Affected				
Other Species of Concern or CNPS List 3 (continued)											
Plants											
m	Henderson's bent grass	<i>Agrostis hendersonii</i>	-	-	3/SC	X		A			
m	San Antonio Hills monardella	<i>Monardella antonina</i> ssp. <i>antonina</i>	-	-	3	X		A			
m	Marin knotweed	<i>Polygonum marinense</i>	-	-	3/SC	X		A			

Notes:

¹ Species Goals:

- R = Recovery. Recover species' populations within the MSCS focus area to levels that ensure the species' long-term survival in nature.
 r = Contribute to recovery. Implement some of the actions deemed necessary to recover species' populations within the MSCS focus area.
 m = Maintain. Ensure that any adverse effects on the species that could be associated with implementation of CALFED actions will be fully offset through implementation of actions beneficial to the species.

² Status:

Federal

- E = Listed as endangered under FESA.
 T = Listed as threatened under FESA.
 PE = Proposed for listing as endangered under FESA.
 PT = Proposed for listing as threatened under FESA.
 C = Candidate for listing under FESA.
 PR = Protected under the Bald and Golden Eagle Protection Act.

Table B-1. Continued

State

CE = Listed as endangered under CESA.
CT = Listed as threatened under CESA.
CCE = Candidate for listing as endangered under CESA.
CCT = Candidate for listing as threatened under CESA.
R = Listed as rare under California Native Plant Protection Act.
CSC = California species of special concern.
FP = Fully protected under California Fish and Game Code.
SB = Specified birds under California Fish and Game Code.

Other

1A = CNPS List 1A.
1B = CNPS List 1B.
2 = CNPS List 2.
3 = CNPS List 3.
SC = Other species of concern identified by CALFED.

³ Potential Effects of CALFED Actions on Evaluated Species:

May be Affected:

X = CALFED actions may result in take of federally or State-protected species; species that are associated with habitat types or occur at specific locations that may be adversely or beneficially affected by CALFED actions depending on where CALFED actions would be implemented, or species that are rare or transient in the MSCS focus area and may be affected by CALFED actions depending on when or where CALFED actions would be implemented.

Not Likely to be Affected:

X1 = CALFED actions do not affect the species, because habitat is not limiting and the species is mobile.
X2 = Species occurs in areas that would not be affected by CALFED actions.

⁴ Decision Criteria:

A = Included because CALFED actions could affect a substantial portion of the species' range or important habitat.
B = Included because of limited distribution or rarity of the species.
L = Included because species is federally or State-listed as endangered, threatened, rare, or fully protected.
P = Included because of the immediate potential to become federally or State-listed.